

## **A Proposal to Explore how to Value Agriculture Ecosystem Services in Vermont**

To develop a system which monitors, evaluates, and monetizes Ecosystem Services (ES) provided by agriculture and delivers both environmental and food security to the Vermont community well into the future.

### **Organization Primary Contacts**

Franklin-Grand Isle Farmer's Watershed Alliance	Larry Gervais - Enosburg Falls
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### **Ecosystem Services (ES) Program**

#### **Planning - 2019** - cost \$625,000

- Coordinator(s) responsible for meetings, information, moving forward with pilot project
- Engage numerous stakeholders throughout Vermont to align development efforts
- Develop Ecosystem Service (ES) metrics
- Solicit input for viable payment models and funding mechanisms
- Consult with private firms about project implementation for phase 1 and 2

#### **Phase 1 - 2020** - \$3.5 M

- One complete farm instrumentation for testing ES measurement method
- Collection of baseline data and ground-truth system measurements
- Determine ES payment rates

#### **Phase 2 - 2021** – Cost to be determined

- Implement ES program on six (6) farms
- Verify data collected meets project goals
- Verify payment rates in line with costs of implementation

#### **Phase 3 – 2022**- Cost to be determined

- Finalize programming for ES metrics, reporting and funding mechanisms
- Scale up to function statewide and determine 3<sup>rd</sup> party management and verification
- Focus outreach to all farmers and stakeholders to engage with new ES system

#### **Phase 4 - 2023** – Cost to be determined

- ES Program made available to all farmers in Vermont

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Stewardship of the land, air, and water is the most important endeavor citizens can strive to achieve. Food security and environmental stewardship are reliant on one another and therefore equally important to obtain. Our natural and agricultural ecosystem in Vermont will be able to quickly and significantly benefit from a system that provides payments to the farmers for measurable improvements in Ecosystem Services (ES).

Vermont farmers are already invested in protecting soil and water resources, they simply need to connect with the other stakeholders to fully develop and implement the ES program. We hope that other stakeholders are willing to assist the farmers with the development of this ES program to assure its success and allow all Vermonter's to reap the rewards.

The idea of paying agriculture for ecosystem services, and the impact it could have on the future of Vermont from an environmental and food security perspective, makes everyone in Vermont a stakeholder. However, first and foremost, this needs to be a farmer-driven process.

Farmers will be represented initially through the 3 farmer-led water quality organizations throughout the state. This group of organizations will work together to start the planning phase of the ES project. One aspect of the planning phase will to secure collaboration and participation from other stakeholders including environmental groups, government agencies, and other interested parties.

Planning for this project will 1) determine methods for monitoring and evaluating the quantity and quality of ES being delivered by agriculture, 2) determine ES metrics and target thresholds, 3) create a system for delivering feedback to stakeholders, 4) develop valuation of various ES to inform the creation of a payment structure, and 5) develop potential mechanisms to pay for the ES.

The pilot project on six base farms will be phased in over three years to systematically test and validate a measurement system for ES; develop a system for payment rates in line with services provided; then expand the ES Program to function state-wide for all Vermont agriculture land.

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